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EXAMINER	
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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/743,480
Filing Date: October 17, 2001
Appellant(s): STEMPLE, GUNTER

James F. McKeown
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed June 26, 2006 appealing from the Office action mailed November 11, 2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,282,473	BRAIG et al.	2-1994
5,400,781	DAVENPORT	3-1995

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 26-28 and 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,282,473 to Braig et al. an in view of US 5,400,781 to Davenport.

As to claim 44, Braig teaches a capnography system comprising a patient interface shown in Fig. 1; an air tube connecting the patient interface to an analysis duct **10**; a CO2 sensor (IR source **14** and detector **22**); a sensor adapter associated with the sensor and in which the analysis duct is arranged (Fig. 1); and an evaluation device **24**; wherein the analysis duct receives a volume of exhaled air from the patient interface via a pressure causing characteristic flow in the air tube, which is caused by pump **28**; wherein a direct measurement of the CO2 level is detected; wherein the analysis duct is fluidly connected at one end to the patient interface which supplies the exhausted air and at the other end to air outside the duct that leads into pump **28** (which is equivalent

to outside air). Braig is silent with regards to the patient interface comprising a mask with a mask adapter having an air tube.

However, Davenport also teaches a system for determining carbon dioxide of exhaled air, wherein the system includes a patient interface comprising a mask **10** and a mask adapter **34** configured to include an air tube **24** connected to an interior portion of the mask; and wherein the a sensor adapter **36** connected to the mask adapter.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use any type of patient interface, including the mask taught by Davenport, since such patient interface is extremely well known in the art. Furthermore, selecting a particular patient interface over another would be a mere obvious matter of design choice since they would all provide the same function of communicating breathable air to a patient and vice versa.

With regards to claim 26-28, Davenport teaches the mask patient interface comprising a probe **30** having an excess oxygen opening provided to supply oxygen to the mask interior; and openings **26** provided in the mask for gas exchange between the mask interior and the outside air.

With regards to claim 45, Braig teaches the sensor adapter having a receiving device for the sensor (the area where the IR emitter and detector are attached to).

With regards to claim 46, the sensor of Braig is fully capable of measuring CO2 content for each exhaled breath of air.

(10) Response to Argument

In response to the appellant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both the Braig et al. reference and the Davenport reference disclose a system for analyzing expired respiratory gases.

The Braig reference discloses a system for monitoring expired gases from a patient under anesthesia (col. 1, lines 17-21), the system comprising a patient interface and an evaluation device. Braig does not provide any specific patient interface means.

On the other hand, the Davenport reference also discloses a system for monitoring expired gases from a patient under anesthesia (col. 1, lines 16-19), wherein the system comprises a patient interface means comprising a mask **10** and a mask adapter **34** for directing expired respiratory gases to a gas analyzer.

Therefore, one of ordinary skill in the art would have found it obvious that the mask adapter of Davenport, which directs expired respiratory gases to a gas analyzer, is fully capable of connecting to the patient interface means of Braig, which receives the expired respiratory gases. Furthermore, it is well known in the art for patient interface

devices to include full face masks, half-masks, nasal prongs, endotracheal tubes, or even laryngeal masks.

It is also noted that a full face mask, as taught by Davenport, allows the expired air from both the nostrils and the mouth of the user to be collected and delivered to a gas monitor, whereat a nasal prong or endotracheal tube is specific to either the nostrils or mouth alone. Furthermore, Davenport teaches that his full face mask allows monitoring of the expired gases of a patient without discomfort to the patient (col. 1, lines 44-46).

Furthermore, both the Braig and Davenport references are directed towards systems that are designed to monitor expired gases from a patient under anesthesia and that one of ordinary skill in the art would therefore have been motivated to combine the teaches of the references.

With regards to the arguments that the Davenport's mask fails to teach a sensor adapter as recited in the claims, it should be noted that the Braig reference teaches said sensor adapter comprising a sensor and a analysis duct, and that one of ordinary skill in the art would combine the sensor adapter of Braig to the mask adapter of Davenport in order for the sensor adapter to receive expired gases from the mask.

The appellant also argued that analysis duct of Braig does not lead unobstructed to outside air. However, the claim language merely recites "an analysis duct connectable at one end with the mask adapter so as to be supplied with the exhaled air and at another end being open so as to lead unobstructed to outside air". As recited in the rejections above, the Examined defined the "analysis duct" to be the "sample cell

10", which is open at both ends (see Fig. 1). That is, one end receives air from a patient interface and the other end opens into a conduit that is connected to a pump **28** without any intervening check valves. Therefore, the expired air flows unobstructed from within sample cell **10** to the conduit that is connected to pump **28**, and wherein said conduit leads unobstructed to outside air.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Darwin Erezo

Conferees:

Michael Hayes

Janet Baxter